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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,079	01/21/2005	Robert J. Lowles	555255012475	5833

7590 01/08/2008
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EXAMINER

PARDO, THUY N

ART UNIT	PAPER NUMBER
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2168

MAIL DATE	DELIVERY MODE
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01/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,079

Applicant(s)

LOWLES ET AL.

Examiner

Thuy N. Pardo

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-70 is/are pending in the application.
- 4a) Of the above claim(s) 29-70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-28 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment filed on October 24, 2007 in response to Examiner's Office Action has been reviewed. Claims 1 and 24 have been amended, and claim 7 has been canceled. This Office Action is made Final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 9-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter "Nelson") US Patent No. 5,937,422 as applied to claims 1-28 above, and further in view of de Campos US patent No. 6,272,456.

Referring to claim 1, Nelson teaches a method of building a custom word list for use in text operations, comprising the steps of:

scanning a collection of text items to identify words in the text items ["input text = DOG, WOLF", see fig. 4; each word in the document is stemmed to its root form, col. 5, lines 41-51];

assigning a weighting to each identified word [each word in the input text is given an input-word score, col. 5, lines 52-55; the words in the final word list are ranked in order according to a final word score, col. 7, lines 24-26; fig. 3]; and

storing [inherent in the system when it performs this method for each document in a database, col. 8, lines 45-47] each identified word and its corresponding weighting [fig. 6; col. 8, lines 15-47].

However, Nelson does not explicitly teach generating these functions on the electronic device although it has the same functionality of creating a word list score to each input words of the input text [see the abstract of Nelson]. De Campos teaches scoring the longest match for each language based on a frequency parameter (i.e., key words) identified within a text sample input on an electronic device (i.e., hand-held devices) [see the abstract; col. 3, lines 4-30; col. 8, lines 39 to col. 9, lines 21].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to have modified the communication service system of Nelson wherein the building for the word list based on the score to each input by incorporating the teachings of De Campos especially the technique for scoring the longest match for each language based on a frequency parameter (i.e., key words) identified within a text sample input on an electronic device; the motivation being to expand and enhance the versatility of Nelson's system by generating these functions on the electronic device as an essential means to increase the flexibility and functionality of performing tasks by remote processing devices.

De Campos further teaches that determining a source of each text item in the collection of text items, wherein the step of assigning a weighting comprises the step of calculating the weighting for each identified word based on the source of the text item in which the word was identified [determine highest scoring between the first language and the second language, 1025 of fig. 10; ab; col. 15, lines 20 to col. 16, lines 8; col. 16, lines 55 to col. 17, lines 10].

Referring to claim 2, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the collection of text items comprises text items stored at a computer system [col. 8, lines 26-44].

Referring to claim 3, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the collection of text items comprises at least one type of text item selected from the group consisting of: sent messages, documents, acronym lists, and existing word lists [collection of unique words in a document, col. 27-38].

Referring to claim 4, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the step of assigning a weighting comprises the step of: calculating a frequency of occurrence of each identified word [col. 6, lines 2-20].

Referring to claim 5, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches determining a number of occurrences of each identified word in the collection of text items; identifying a maximum number of occurrences and calculating a frequency of occurrence of each identified word based on a number of occurrences of the identified word and the maximum number of occurrences [col. 6, lines 44-63].

Referring to claim 6, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches adjusting the weighting of an identified word when the word is used in text operations on the electronic device [col. 2, lines 62-67].

Referring to claim 9, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches categorizing the identified words into categories; and storing an indicator of the category of each identified word with the word and corresponding weighting [see table 2 in col. 21].

Referring to claim 10, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the categories are selected from the group consisting of: address, name, hyperlink, recurring word grouping, different language categories, and user added words [different language categories, col. 19, lines 11-24; table 1 in col. 20].

Referring to claim 11, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the collection of text items comprises an existing word list having words and predefined weightings; the step of assigning comprises the step of converting the predefined weightings into converted weightings for each word in the existing word list and the step of storing comprises the step of storing each word in the existing word list and its corresponding converted weighting [converting “unique input word list” to “tree-word list” corresponding converted weighting, fig. 2-3].

Referring to claim 12, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches normalizing the predefined weightings [normalized score based on the log of a score within a range of numbers zero to 255, col. 19, lines 37 to col. 20, lines 7].

Referring to claim 13, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches applying a predetermined weighting factor to the predefined weightings [col. 17, lines 51-65; col. 18, lines 58-67; col. 31, lines 1-4].

Referring to claim 14, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches integrating each identified word and its corresponding weighting and an existing word list having words and predefined weightings [col. 17, lines 51-65; col. 18, lines 58-67; col. 31, lines 1-4].

Referring to claim 15, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches converting the weighting of each identified word into a converted weighting.

Referring to claim 16, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches converting the predefined weightings into converted weightings [see fig. 4; col. 7, lines 37 to col. 8, lines 11].

Referring to claim 17, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the step of integrating comprises the step of converting the weighting of each identified word and the predefined weighting of each word in the existing word list into a converted weighting [see fig. 4; col. 7, lines 37 to col. 8, lines 11].

Referring to claim 18, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches determining whether any of the identified words occur in the existing word list; and assigning a resolved weighting to identified words that occur in the existing word list [fig. 5-6; col. 6, lines 35-62].

Referring to claim 19, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the resolved weighting is the weighting of the identified word [fig. 5-6; col. 6, lines 35-62].

Referring to claim 20, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the resolved weighting is based on the weighting of the identified word and the predefined weighting of the identified word in the existing word list [fig. 5-6; col. 6, lines 35-62].

Referring to claim 21, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches receiving a selection input from the user to select text items to be included in the collection of text items [profile of complete words, ab].

Referring to claim 22, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches mapping each identified word to a keystroke sequence on the electronic device and storing the identified words and corresponding weightings and keystroke sequences at the electronic device [letter sequences, ab; col. 27 to col. 2, lines 18; col. 2, lines 50 to col. 3, lines 14].

Referring to claim 23, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches mapping the user input word to a keystroke sequence on the electronic device [letter sequences, ab; col. 27 to col. 2, lines 18; col. 2, lines 50 to col. 3, lines 14] and transferring the user input word to the computer system [col. 8, lines 39-44].

Referring to claim 24, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a first data store and a second data store [local and remote memory storage devices, col. 8, lines 38-44].

Referring to claim 25, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the second data store is implemented in a single memory component.

Referring to claim 26, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the first data store comprises storage areas in a plurality of memory components [22 of fig. 1].

Referring to claim 27, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a keyboard mapper [40 of fig. 1] for mapping each identified word to a keystroke sequence on the electronic device [handheld device, col. 8, lines 34-39].

Referring to claim 28, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a word list loader at the electronic device configured to receive the identified words and their corresponding weightings from the second data store and to store the identified words and their corresponding weightings at the electronic device [located in both local and remote memory storage devices, col. 8, lines 39-44].

Allowable Subject Matter

3. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 8, the feature that text item sources include a user text item source and an external text item source, and wherein text items from the user text item source are assigned a higher weighting than text items from the external text item source, taken together with other limitations of claims 1 or 24 was not disclosed by the prior art of record.

Response to Arguments

4. Applicant's arguments filed on October 24, 2007 have been fully considered but they are not persuasive.

Applicant argues that the cited prior art do not teach calculating the weighting for each identified word based on the source of the text item in which the word was identified.

Examiner respectfully disagrees. Examiner believes that de Campos teaches this limitation. De Campos teaches identifying letters or words inputs from different language profiles (or sources) and scoring each language based on frequency letters or words inputs of the matched RLS in profiles for each language [see the abstract] and also determine highest scoring between the first language and the second language, 1025 of fig. 10; col. 15, lines 20 to col. 16, lines 8; col. 16, lines 55 to col. 17, lines 10].

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Thuy N Pardo
Primary Examiner
Art Unit 2168

A handwritten signature in black ink, appearing to read 'Thuy N. Pardo', with a long, sweeping horizontal line extending to the right.

THUY N. PARDO
PRIMARY EXAMINER